



There are two characteristics to consider when assessing tree condition: health and structure. Most health problems are easy to spot; our common sense helps us to steer clear of unhealthy looking trees. Structural defects on the other hand, are easily overlooked. The purpose of this publication is to help you learn to recognize structural defects on young trees and know when a particular tree should be avoided.

HOW TO BUY A TREE

The Golden Rule of Tree Buying - Always Select Trees Yourself!

When buying trees, there are 4 issues to settle: tree species, size, price and condition. You can settle 3 of them over the telephone (species, size and price). You should assess tree condition with your own eyes.

Inspect the crown:

Be extra careful to inspect for structural defects on large-maturing shade trees like oaks and maples. Young shade trees with structural defects (poor branch attachments, for example) become serious safety hazards as they reach maturity. This is not as much an issue with smaller ornamental trees.

For large-maturing shade trees, beware of trunks that fork low to the ground, tight (V-shaped) branch crotches with the bark rolled inward, and multiple branches arising from one place on the trunk. These are structural weaknesses.

Look at the branches - this is where the leaves (the food factories of the tree) will be. You're looking for a general

covering of small - to - medium size branches. Beware of large branches that are low on the trunk.

Inspect the Trunk

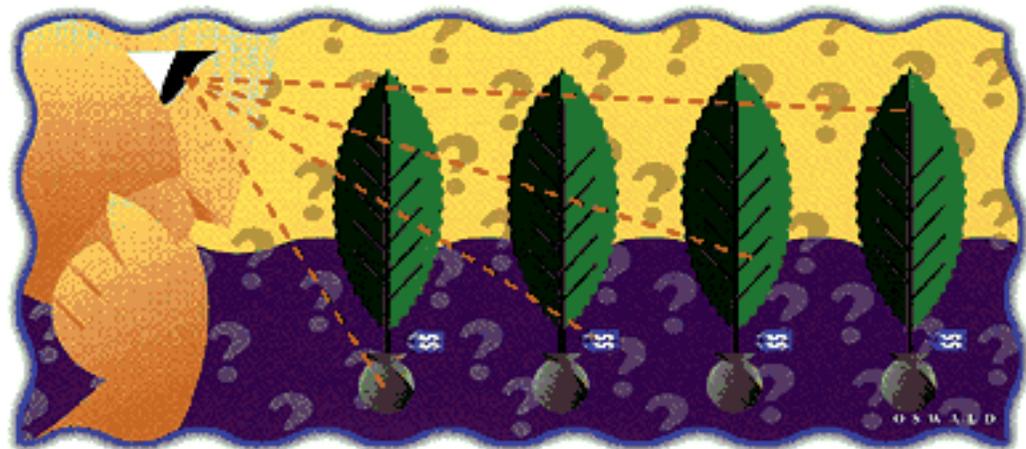
These defects are important to avoid on all trees:

Avoid trees with large bark injuries (deer rubbing, mechanical wounds, etc.). Large bark injuries can develop into cracks and the wood behind these injuries can develop decay.

Avoid trees with sprouts around the base - this is a sign of biological stress and is probably an indication that the tree was planted too deep.

Learn to recognize proper pruning - avoid trees with branch stubs or flush cuts. Improper pruning can cause a number of problems, including "frost cracks", "sun scald", excessive sprouting and decay.

Trunk wrap is unnecessary and can hide defects. Some nurseries use a cardboard shield to protect the trunk from injury during handling. Always remove it to inspect the



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trunk before you accept the tree. It can be reattached for further handling.

below). You should insist that the root ball meets these specifications.

Inspecting the Roots:

For balled and burlapped trees, avoid undersized rootballs. Trees are sold by caliper (trunk diameter 6" above the ground), or height. The American Association of Nurserymen maintains a set of standards for nurseries selling trees (see table

For container-grown trees, avoid trees with large circling roots. Very gently remove the container to inspect the root system.

For bare-root trees, avoid trees with dried up or mechanically damaged roots.

standards for nursery stock			
Caliper	Height	Root Ball Diameter	Approx Weight
1 inch	5 Feet	at least 16 inches	100 pounds
1¼ inches	7 Feet	at least 18 inches	150 pounds
1½ inches	8 Feet	at least 20 inches	200 pounds
1¾ inches	9 Feet	at least 22 inches	260 pounds
2 inches	10 Feet	at least 24 inches	300 pounds
2½ inches	12 Feet	at least 28 inches	600 pounds
3 inches	14 Feet	at least 32 inches	750 pounds
3½ inches	16 Feet	at least 38 inches	1350 pounds
4 inches	18 Feet	at least 42 inches	1800 pounds



The South Carolina Urban & Community Forestry Council is a nonprofit organization whose mission is to foster stewardship of urban and community forests. For more information, call 803-896-8864.